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PP/4/03

Subsidizing Agriculture in Belarus: Declared Objective and Actual Outcomes

Summary

This paper analyses the government's objectives for development of the agricultural sector in Belarus, the performance within the sector over the last decade, and the current system of subsidizing agriculture. It is argued that the current system of subsidization does not attain the government's declared objectives. The system is ineffective in the sense that not each rouble of agricultural subsidies reaches the agricultural enterprises: to a large extent the subsidies leak to the suppliers of purchased inputs, to the rural population and to the consumers of food products. Moreover, the government might be pursuing two incompatible objectives at the same time. The main conclusion of the paper is that the government should clearly restate its vision of the place of agriculture within the national economy, and work out a long-term development strategy for the sector.

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1. Introduction

The important question of what domestic support to agriculture should look like is on the current agendas of many countries. But where western governments often spend taxpayers' money to limit the production of agricultural goods, the Belarusian government tries to keep agricultural production alive with the help of an enormous and complicated system of subsidies. Official sources admit that some 30 different subsidization schemes are currently in use. The declared objective of agricultural development and hence of subsidizing the sector is to achieve food sovereignty (autarchy) for the country. Does it make sense to pursue this objective? If so, does the current system of subsidies fit this objective optimally? An attempt to answer these questions is undertaken below.

2. Description of the objectives, which the domestic support for agriculture is supposed to achieve according to the Belarusian government

"The strategic objective of agribusiness development is achieving and maintaining food sovereignty of the country" – these are the first words of the "National programme for increasing the agribusiness efficiency for the period of 2000 to 2005", the main document that sets the direction of development for the sector. "Food sovereignty" is defined to mean that domestic production should cover no less than 85% of the consumption of nine main product groups – grains, potatoes, vegetables, fruits, vegetable oil, sugar, milk, meat and eggs.

The main declared aim of all oblast programs, is – in the words of the Minsk oblast for instance - "to ensure sustainable development and sustainable efficiency increases of the oblast's agro-industrial production, in order to increase the output of agricultural products".

Both, the increased output and greater efficiency are to be achieved through: "the technical and technological re-equipment of agriculture, strengthening of the productive potential, intensifying crops and livestock production, and social and economic transformation".

The concept of food sovereignty is poorly grounded both in theory and in practice. In fact, the Belarusian food production is to a large extent dependent on imported oil products, and on electric energy mainly imported from Russia or generated using imported energy resources. Thus, increasing food production in the name of food sovereignty would cause an increasing dependence on imported (moreover, from a single source: Russia) energy recourses, which contradicts the principle of overall economic sovereignty, which is also encouraged by the government. To define what is more efficient in macroeconomic terms – to import energy resources and use them to produce food, or to import food products directly - would require a separate study.

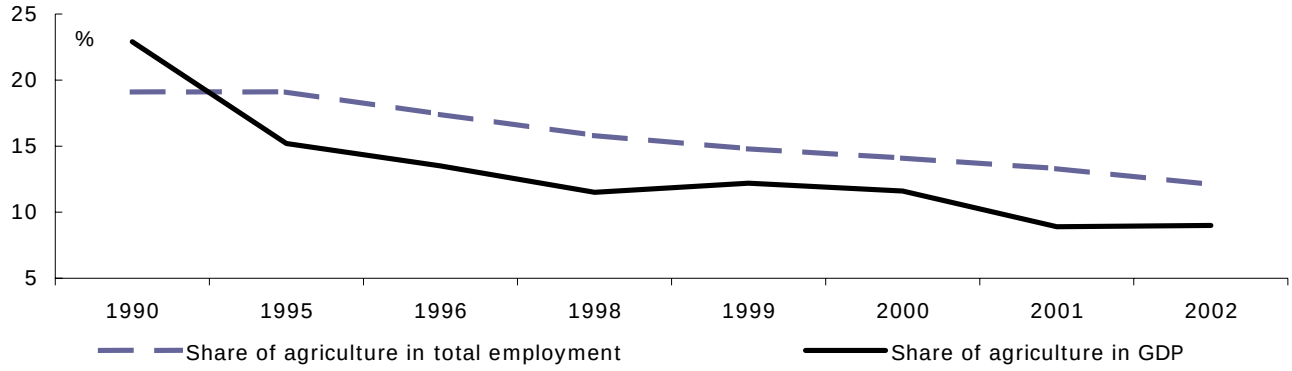
3. Description of the system of subsidization versus performance of the sector

3.1 Performance of the agricultural sector in recent years

The agricultural sector is one of the most heavily regulated spheres of the Belarusian economy; mostly due to the important role agriculture plays in the economy. Unlike in the EU or even in some CIS countries, Belarusian agriculture employs 13.3% of the total labour force, it's share in the GDP amounts to 8.9%[1]. The percentage of the rural population within the total population of Belarus remains at the level of 30%. The importance of agriculture has been declining over the last decade. In 1990 agriculture employed 19.1% of the total workforce and generated 22.9% of the GDP (see Figure 1). The trend itself is positive and illustrates that the process of correction of the structure of the national economy. The share of agriculture in the GDP of Belarus was (and to some extent still is) too high for an industrialized country.

[1] Data for the year 2001.

Figure 1. The role of agriculture in the Belarusian economy



Source: Ministry of Statistics and Analysis

In Belarus, agricultural products are produced by three major entrepreneurial groups – state agricultural enterprises (SAEs), (which in their turn have various legal statuses and organizational structures, i.e. collective farms, state farms, etc.), households and private farmers. The agricultural output structure is presented in Table 1.

Table 1. Structure of agricultural output in Belarus (%), 1990-2001

Year	1990	1995	1996	1998	1999	2000	2001
SAEs	76.3	51.6	51.1	60.6	54.5	61.2	60.6
Households and private farmers	23.7	48.4	48.9	39.4	45.5	38.8	39.4

Source: Ministry of Statistics and Analysis

The main domestically produced basic foodstuffs are: cereals (18.9%), potatoes (17.1%), milk (14.0%), pork (11.5%), and vegetables (10.4%).

Households and private farmers use much less land and other inputs than do collective farms to produce 65% of what the collective farms produce (in 2001). To do this, they only use 15% of the agricultural land, while the SAEs use the remaining 85%.

Private farmers have not yet become an essential part of the Belarusian agricultural sector. The total number of private farmers peaked at 3000 in 1996, and is now around 2400. Private farmers occupy only 1% of the land and produce about 1% of the general output of all agricultural products.

At first glance, the performance of individual producers of agricultural products is most impressive. Households produce about 40% of the general output of agricultural products, using only 15% of the total agricultural land area[2]. As much as 93% of wool, 89% of potatoes, 85% of vegetables, 40% of eggs, 39% of milk, 26% of meat and poultry are produced by households. This paradox exists for two reasons: the incentives are better for households and an informal reallocation of productive resources from the collective farms to households takes place, which will be discussed below.

While the output of the agricultural organisations has been stagnating, households have been producing more goods every year. The production volume of the SAEs has decreased to almost half the level of 1990, while households managed to increase their output of agricultural products by 26% (see Table 2).

The agricultural sector generates significant losses in the Belarusian economy. The share of loss-making agricultural enterprises increased from 33.3% in 1998 to 58.7% in 2002. The total reported losses of SAEs amounted to 90 m USD in 2002, having increased from 25 m in 1998. Crop yields have declined since 1990. Grain yields decreased from 27.2 quintals per hectare in 1990 to 19.9 in 2001, and the potato yield from 138 quintals per hectare to 123 over the same time period.

[2] In fact, 40% may be a low estimate for the share of private production in overall agricultural output. Data on the volumes of goods produced by households are collected by the village councils and then forwarded to the rajon's department of statistics. Quite often the local authorities shortcut the system and do not inspect all households properly. Generally Belarusians are inclined to underestimate the volumes of goods produced within their households, crop or milk yields etc.

Table 2. Dynamic of the output of agriculture (at constant prices), 1991-2001

Year	1991	1992	1993	1994	1995	1996	1998	1999	2000	2001
1990=100%										
Sector total	95.1	87.0	90.3	77.3	73.6	75.4	71.2	65.3	71.4	72.7
SAE	92.0	76.5	73.4	61.8	54.6	55.2	56.1	48.6	54.1	55.5
Households and private farmers	104.6	119.4	142.0	124.9	132.3	137.8	117.7	116.6	125.1	126.2

Source: Ministry of Statistics and Analysis

3.2 Classification of the subsidies to the agricultural sector

Financial support is provided to collective farms in a number of direct and indirect ways. The scale and scope of agricultural subsidization are extremely large and it's difficult to estimate them accurately. One of the noteworthy things about the subsidies is that they not only support collective farms as organizations, but also allow the collective farms to support large "social spheres" and rural infrastructures as well as individuals who work or live in rural areas. All households producing agricultural products use the production resources of collective farms to some extent, and without full cost compensation. That means that at least some part of the state subsidies to collective farms end up subsidising the agricultural output of households.

Every year the Belarusian government spends state funds equalling 3-4% of GDP (10-12% of the consolidated state expenditures) to support agricultural enterprises. This is only the visible portion of the subsidies. Many other support payments do not show up in the state budget.

Generally speaking, all subsidies can be divided into the following groups:

1. Budgeted state expenditures under the headings: "Expenditures for agriculture" and " Fund for supporting producers of agricultural products" (central and local ones).
2. Credits at below-market interest rates. These credits were made available by the National Bank until 2001; thereafter this burden was shifted to commercial banks.
3. Write-offs of credits.
4. Preferential tax treatment.
5. Preferential (lower) prices for some purchased inputs (like fuel, electricity etc.).
6. Non-monetary transfers from other sectors. Basically these are the most complicated and hidden forms of subsidies.

This classification scheme is quite artificial, since the six groups overlap one another. For example, the amounts that are to cover the banks losses for their credits to the agricultural sector are partly included in the state budget. On the other hand, any losses that are not compensated for, i.e. when the banks are forced just to give away some of their money, this becomes an internal problem of the bank, which does not show up in the national statistics. It's extremely difficult to estimate the expenditures under points 3, 4, 5 and 6. There are no statistics on these transactions. Many of these transactions arise out of regulations enacted by the oblast and rajon authorities.

One of the most detailed descriptions of the channels of state support to agriculture can be found in the agribusiness development strategy 2001-2005 of the Minsk oblast. See Box 1 for the list of subsidies.

Box 1. List of support measures, Program of agribusiness development in Minsk oblast for the period of 2001 to 2005

1. Paying mark-ups to the legislated prices on agricultural products sold to the state reserve or within the oblast.
2. Actions aimed at fertility increases of agricultural land.
3. Financing a number of national and oblast programs, and technology-improving actions in various fields of agribusiness.
4. Supporting pedigree breeding, compensating costs for artificial insemination.
5. Subsidizing melioration work.

6. Actions preventing and eliminating especially dangerous cattle and plants diseases.
7. Human resources development.
8. Covering losses on prices of products that are socially important.
9. Capital construction.
10. Supporting implementation of regional development programs for the agro-industrial sector.
11. Maintenance of public organisations that operate within the sector.
12. Financing other strategically important actions.
13. Buying agricultural machinery.
14. Covering lease payments for rented machinery and equipment, covering interest rates for bank loans to purchase and repair machinery and equipment.
15. Buying equipment for cattle farms.
16. Buying machinery for other SAEs.
17. Buying spare parts for the repair of agricultural machinery.
18. Buying agricultural machinery for organizations that specialize in repairing agricultural machinery.
19. Buying technological equipment to be used to repair agricultural machinery.
20. Covering the 9% mark-ups for firms that buy, store and deliver agricultural machinery.
21. Compensation for bank losses for loans for agricultural machinery repair.
22. Covering commissions and insurance payments for loans intended to purchase agricultural machinery.
23. Development of technology of agricultural production.
24. Creation and development of high technology based production.

The list in the Box 1 does not include such other widespread measures of support as tax preferences, debt rescheduling, credit write-offs, lower than normal industry tariffs for electricity and heat. Many of the measures enumerated fall within the Green Box measures of the WTO classification and are quite widespread in western countries too. Yet the largest portion of the measures would fall into the Aggregate Measure of Support (AMS) category, and can be classified as price support and as input subsidies. According to different governmental documents there are some 27-30 channels of agricultural subsidization in Belarus.

During the WTO accession negotiations the Belarusian side requested a base total AMS of $752 m (the average value over the base period of 1995 to 1997), wherein the product specific AMS amounts to $115.13 m, and the non-product specific AMS to $636.86 m. Tax exemptions valued at $282.76 m constitute the largest fraction of the $752 m.[3]

The total amount of agricultural subsidies proposed during the WTO negotiations is about 2 to 2.5 times higher than the amount of subsidies directly shown in the state budget. The purpose for doing this is to maintain the AMS at a certain level after having made the obligatory reductions upon WTO accession.

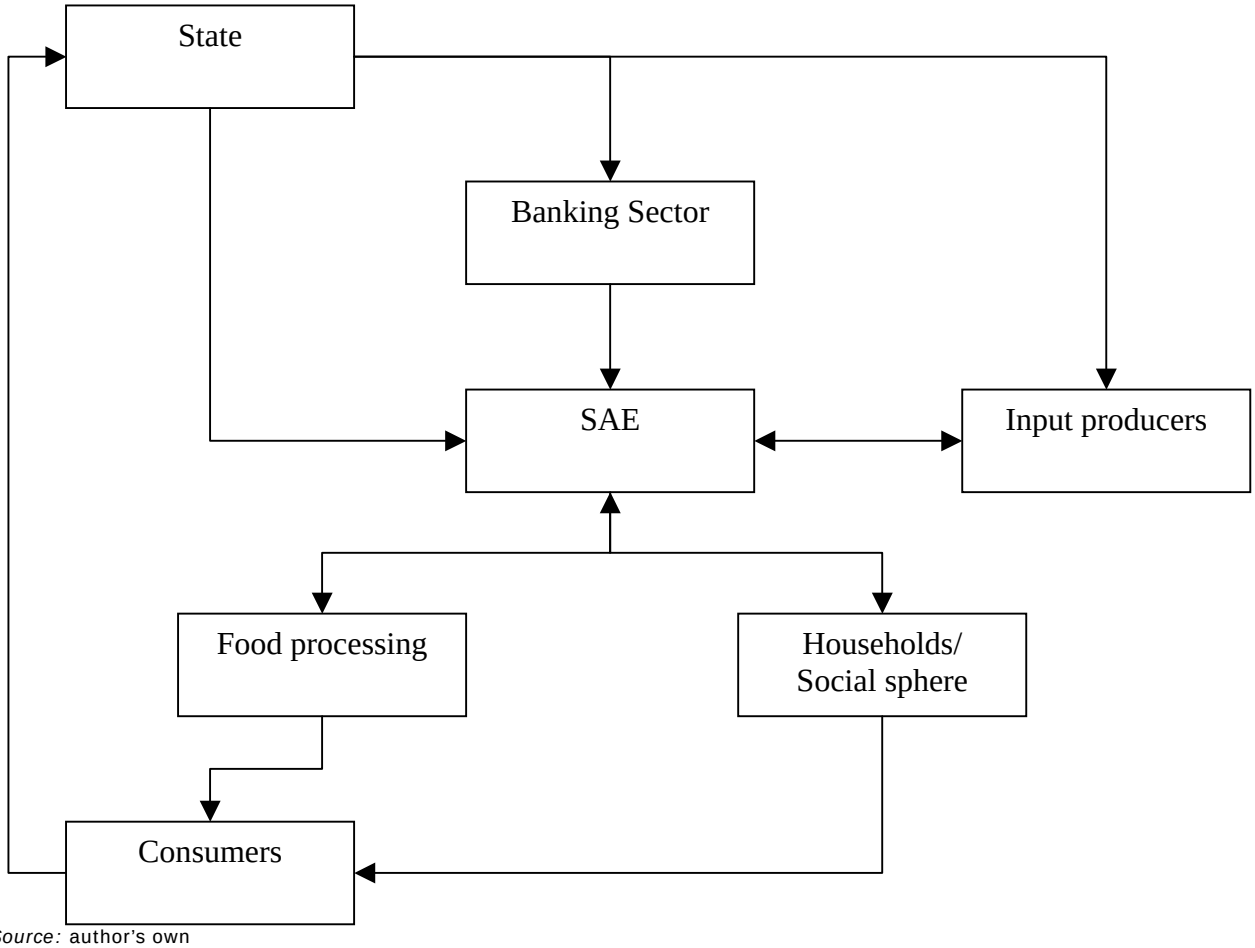
3.3 Channels of subsidy distribution

On their way from the government to the SAEs, agricultural subsidies affect several major players like banks, purchased input producers, food processors, the population of rural areas, and consumers of agricultural products. All these players are shown in Figure 2, which illustrates the channels of redistribution of agricultural subsidies in Belarus. The first step in this schematic is that banks (mainly Belagroprombank and Belarusbank) are forced to issue

[3] Recommendations and proposals on the establishment of a common agrarian market among the CIS and the WTO issue: at http://www.aris.ru/WIN_E/TACIS/TACIS_2001/a/

loans to the SAEs, who use them to purchase various inputs – fertilisers, feed stuffs, seeds, fuel, electricity, machinery and equipment, etc. Some part of these loans is used for salaries of agricultural workers. Usually the inflows are too small to pay all debts, and because of soft budget constraints the government reschedules the overdue debts and forces the banks to issue additional loans. At a later time, some bank losses are compensated, but high inflation makes these compensations fairly meaningless.

Figure 2. Channels of agricultural subsidies' distribution in Belarus



Source: author's own

As the SAEs are not only production entities but also perform some functions of the local administrations, they forward some of the inputs received to support the rural infrastructure, the so-called "social sphere" and, finally, to household agricultural production[4]. Nearly everyone who lives in rural areas, currently works or previously worked for an SAE, maintains a small private plot[5], as well as many people working in the cities do. The private plots occupy only 15% of the agricultural land, but 40% of the agricultural output is produced thanks to their existence. This phenomenon exists because all current and past employees of the SAEs: i) use the machinery of their organizations on their private plots, paying only for the fuel, ii) obtain various feedstuff to feed their cattle and poultry for free, iii) receive some purchased inputs – fuel, fertilisers etc. for free, and iv) appropriate for their use some ready-to-be-sold products. These transfers are consumed within households, sold at the numerous market places directly to customers or sold to food processors and hence constitute part of the net income of the households. In actuality, the SAEs act as intermediaries between the households

[4] As president Lukashenka put it in a recent interview: "Why do I support collective farms? It is very simple. 35% of the pensioners live there. They used to work there. A collective farm is not only a firm, but also an administrative body. Neither the local council, nor the village administration take decisions, or help people, it is the collective farms that do this. What would it mean to destroy this system today? It would mean to ruin 35% of those people who can hardly make a living today. We should keep this in mind. You see, they {collective farms} fulfil major social duties in rural areas. And we make collective farms fulfil these duties. But we help them as well".

[5] One may possess a private property plot with a size up to 3 ha for this purpose.

and the food processing firms, collecting milk and cattle from the former and delivering it to the latter. In the relationship between the SAEs and households, agricultural subsidies leak from the former to the latter, then parts of them get back to the SAEs in the form of purchased products and the remainder stays with the households.

After the agricultural products are produced, they are sold at legislated prices to food processors. As a rule, the legislated prices are lower than cost of producing the product, therefore subsidies are passed on to the food processing firms and hence to consumers.

The connection between the SAEs and the input suppliers, especially domestic ones, is not as clear as between the SAEs and other players. On the one hand, the various input suppliers experience a more or less stable demand for their products, but on the other, payments for delivered products are almost always delayed and are often made through various barter and other clearing schemes.[6]

3.4 Effectiveness of the current system of agricultural subsidies

As a matter of fact, subsidies are provided to state agricultural enterprises without ever being related to their performances. Thus, it can hardly be said that the subsidies are aimed at supporting agriculture or at ensuring the "food sovereignty" of the country through increased production, rather than at simply supporting people who work in the agricultural sector or live in rural areas. To be more specific, it should be noted that these social groups constitute more than one third of country's electorate.

There is an almost perfect correlation between the state expenditure per employee and the average annual salary in the sector (see Table 3). This fact also proves that the subsidies are simply aimed at supporting workers on collective farms. Moreover, the amount of the subsidies allocated by the state budget divided by the number of employees of the SAEs exceeds the average annual salary of these employees. Thus, the amount of domestic support to agriculture is large enough to cover the salaries of agricultural workers, providing them the opportunity not to work for their SAEs.

As the 1999-2001 data shows, the SAEs receive only 70 percent of their inflows as payments for delivered products and services, and 20% as direct subsidies and credits. If non-monetary transfers were counted as well, this share would be much larger yet.

Table 3. Selected indicators of the agricultural sector in Belarus, 1998-2003

Year	1998	1999	2000	2001	2002	2003, 1st quarter
Total budget expenses for agriculture, m USD[7]	170.6	148.7	372.2	452.8	418.1	107.5
Share in GDP, %	3.0	2.6	4.3	3.8	2.9	2.3
Gross losses, m USD	25.8	15.6	43.1	85.3	90.6	26.9
Share of loss-making enterprises	33.3	36.9	39.4	54.2	58.7	n. a.
Number of enterprises	2489	2459	2414	2388	2388	2388
Expenditures per enterprise, thousand USD	68.6	60.5	154.2	189.6	175.1	45.0
Number of employees in agriculture, thousands	624	588	560	527	550	500
Expenditures per employee, USD	273.5	252.8	664.6	859.2	760.2	214.8
Average annual (quarterly) salary, USD	261.2	249.5	433.1	680.9	748.5	216.7

Source: Ministry of Statistics and Analysis, own calculations based on the MSA data

On the other hand, the state agencies still buy a great portion of the raw agricultural products at legislated prices, which are below market prices. Each collective farm has an obligation to supply a pre-determined volume of products every year. That's why such a large share of agricultural enterprises makes losses. The existence of the various obligatory provisions and

[6] For instance, there is an item in the state budget called "Covering the indebtedness of the Minsk tractor plant to the Social Protection Fund by delivering produced tractors to the SAEs". This particular figure alone amounts to about USD 2.5 m in 2003.

[7] The conversion rate used is the market exchange rate. The official and market exchange rates used to differ greatly until the end of 2001.

subsidization makes the entire system obscure. At the end of the day, it's impossible to define whether the agricultural sector benefits from these policies or not.

4. Actual objectives which the domestic support for agriculture ought to achieve

Since the SAEs failed to increase their outputs (and efficiencies) significantly over the recent years, and it seems absolutely impossible to achieve the food sovereignty goal set by the government, it can be argued that either these objectives are unrealistic or the policy itself is inappropriate. Looking at the recent performance of the sector – the low production efficiency, the high indebtedness, the high number of loss-making enterprises, etc – it seems quite logical to suppose that the subsidies are actually counterproductive. The amount of subsidies increases, but so do the losses generated in the agribusiness.

These facts suggest that the actual objectives of the state support for agriculture may be different from the officially stated goals. Since the rural areas in Belarus are far less developed than the cities, subsidising agriculture is too attractive a way of raising the welfare of the rural population to be ignored by the Belarusian government. The problem is that the SAE subsidization methods used by the government today are not the best solution for the problem. Many studies on transfer efficiency[8] in OECD countries (which includes transition economies such as Poland, Hungary and the Slovak Republic) have shown that support measures like price support and input subsidization are among the least efficient approaches for raising farm incomes. Huge amounts of subsidies of this kind leak to input suppliers and customers without significantly raising farm revenues (see the Appendix for precise numbers for OECD countries. Though this doesn't imply that the numbers would be exactly the same for Belarus, the tendency is undoubtedly similar).

As we have already seen, subsidies to the SAEs leak to the population of rural areas and increase their welfare. Yet this is quite an unusual and expensive way to increase the welfare of the rural population, since it involves the constant use of thievery and corrupt practices. Besides, even this informal support doesn't help to increase standard of living in rural areas to an acceptable level. Salaries and the general standard of living in rural areas are lower then in cities, which is why there is a permanent migration and brain drain from rural areas to the cities. One more proof is that the average salary of a worker at a plant producing agricultural machinery is much higher than that of a collective farm worker.

It's easy to notice the contradiction between the declared and actual objectives of the subsidization. Making agriculture more productive and implementing modern technologies as stated in the official programs means replacing labour with capital at the farms. If other branches of the economy cannot absorb the redundant agricultural labour force, this will inevitably create huge unemployment and a further decrease in the welfare of the rural population.[9]

5. Conclusions

1. The declared objective of agribusiness development and subsidization – achieving food sovereignty for the country through increased productivity and efficiency of the agribusiness – contradicts the other often stated objective of subsidising agriculture, which is maintaining and increasing the standard of living in rural areas. Pursuing two incompatible objectives at the same time will not produce an efficient outcome. The existence of this paradox within the national agricultural policy suggests that a long-term reassessment of agriculture's role in the economy is needed.

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[8] The term "transfer efficiency" of agricultural support generally refers to the effectiveness of agricultural policies in delivering additional income to farm households. It illustrates how much of the benefit from every rouble of taxpayers' money spent on agriculture reaches the farmers and how much is received by other players or is simply wasted.

[9] In East Germany, about 85% of the labour that had been employed at agricultural enterprises was eliminated within just a few years following reunification. Farms became much more productive very quickly, but in many rural areas unemployment is still as high as 25-30%.

2. If the government wants to increase food production through making the national agribusiness more efficient and compatible, it should reform the enterprises and provide producers of agricultural products with stronger incentives. To do so, the partial elimination of the currently unfocused agricultural subsidies rather then their extension would be required.
3. If the government actually wants to maintain a certain standard of living in rural areas, the tools that are currently employed are the least efficient ones. Support measures such as price supports and input subsidies do not increase the SAEs' revenues significantly and are even less helpful for increasing the welfare of the rural population. Direct income transfers would be of much greater help for the rural population than price support and input subsidization measures for SAEs.

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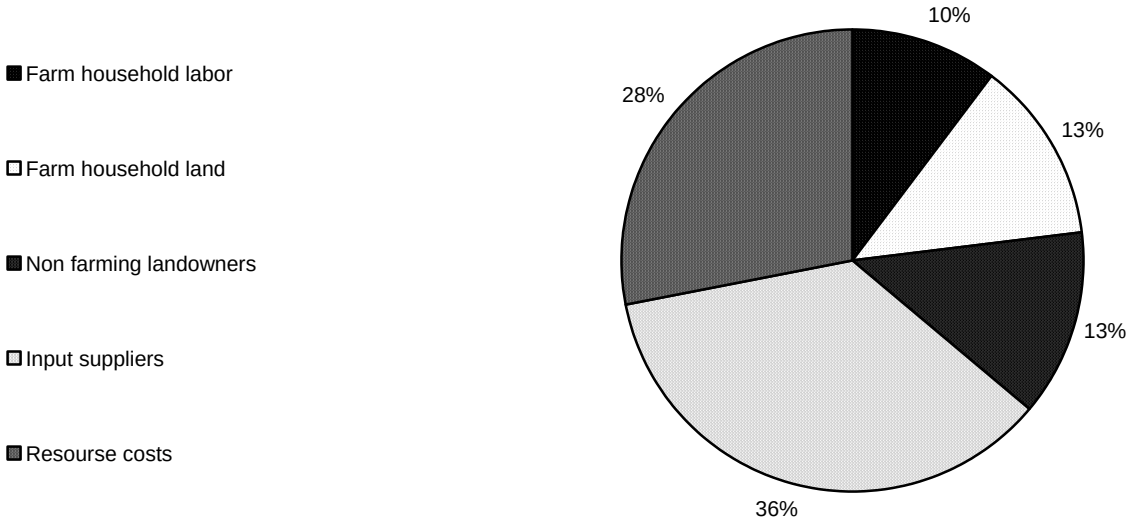
August 2003

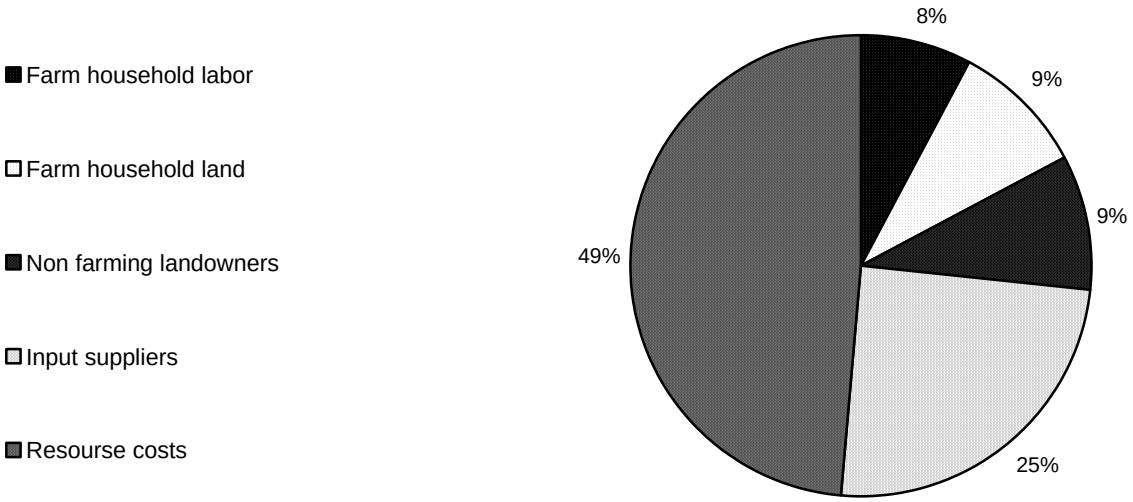
Appendix

Figure 1. The income transfer efficiency of market price support



Source: Agricultural policies in the OECD countries: A positive reform agenda. COM/AGR/TD/WP(2002)19/FINAL

Figure 2. The income transfer efficiency of input subsidies



Source: Agricultural policies in the OECD countries: A positive reform agenda. COM/AGR/TD/WP(2002)19/FINAL